

Amendments to the Specification:

Please replace the paragraph beginning at page 28, line 26 with the following amended paragraph:

The main drawback of VCSELs as optical tweezers is their relatively low output power, and therefore low trapping strength. In accordance with the present invention, this disadvantage is at least partially compensated by permanently changing the lasing mode of the VCSEL prior to use. The spatial emission mode of a packaged midsize proton-implant VCSEL is converted from a Hermite-Gaussian mode to a Laguerre-Gaussian mode through a simple post-fabrication annealing process. Laguerre modes are characterized by their rotational symmetry and in higher orders can very closely resemble the so-called "donut" mode. Shown in Fig. 2 is a comparison of the fundamental R Gaussian mode emitted from a VCSEL of Fig. 2a to the high-order LaGuerre mode of Fig. 2b. The energy of the emitted beam is moved to the outer edge of the u aperture where, in an optical trap, photons have the greatest axial restoring force. Energy has been removed from the center of the beam, thereby decreasing the detrimental scattering force that acts to push particles out of the trap.